

APPENDICES

FORT LAUDERDALE Building a Livable Downtown

ZONING ANALYSIS

DOWNTOWN FORT LAUDERDALE REGIONAL ACTIVITY CENTER

LDR SUMMARY

SEC. 47-13.21. TABLE OF DIMENSIONAL REQUIREMENTS FOR THE RAC DISTRICT.						SEC. 47-13.20. DOWNTOWN RAC REVIEW PROCESS AND SPECIAL REGULATIONS.			
ZONING DISTRICT	CATEGORIES OF PERMITTED AND CONDITIONAL USES	MAXIMUM HEIGHT	FAR	MAX DENSITY	SETBACKS	PEDESTRIAN PRIORITY STREETS SECTION H	IMAGE STREETS SECTION I	NEW RIVER WATER FRONT CORRIDOR SECTION J	ALL OTHER RAC STREETS SECTION K
RAC-CC	Automotive, Boats, Watercraft and Marinas, Commercial Recreation, Food and Beverage Sales and Service, Lodging, Manufacturing, Parks, Recreation and Open Space Uses and Facilities, Public Purpose Facilities, Residential Uses (Note 1), Retail Sales, Services/Office Facilities, Storage Facilities, Wholesale Sales, and Accessory Uses, Buildings and Structures	None, except for neighborhood compatibility requirements**, and adequacy requirements. South of SE/SW 7 St. and North of NE/NW 5 St, 150ft max at boundary*****	None	None	Front - see Sec 47-13.20 Side – none, unless provided in Sec 47-13.20 Rear – none, unless provided in Sec 47-13.20	1. Building Frontage Setback Requirement – min 75% of linear frontage on ground floor 10 ft from property line. 2. General Stepback and Setback Requirements – for portions of building located more than 9 ft above the sidewalk, See subsection H.9 3. First Floor Uses – min 75% linear frontage for a depth of at least 20 feet from the building front shall be used for retail sales, retail banking, residential uses, food and beverage, commercial recreation, governmental facility, service use (not including professional office), public museum or art gallery, or other public cultural facility accessible to the public and occupants of the building in which the use is located.	1. Street requirements see Sections H.1, H.2, H.4, H.5, H.6, H.7, H.8, H.9, H.10, and H.11.	1. Applies to parcel within 100 ft of the river (within RAC-CC & RAC-AS). A Min 60ft setback from seawall or high water mark for principal structures or less if existing ROW is less than 60ft, but in no case shall any be less than 45ft. Exceptions for less than 45ft setback: a. Any residential or marine use that is no higher than 35ft may have portions within a 20ft min setback (but must be compatibility). b. Structures may exceed requirements of J.1 and J.1a, but must provide additional setback requirements as structure height increases and must follow contain specific architectural features.	1. All other streets shall provide: a. Min setback of 5ft from property line. b. Modifications may occur pending development.
RAC-AS	Boats, Watercraft and Marinas, Commercial Recreation, Food and Beverage Sales and Service, Lodging, Public Purpose Facilities, Residential Uses (Note 1), Retail Sales, Services/Office Facilities, and Accessory Uses, Buildings and Structures.	None, except for neighborhood compatibility requirements**, and adequacy requirements	None	35 du/acre	Front - see Sec 47-13.20 Side – none for nonresidential and mixed use unless otherwise provided for in Sec. 47-13.20; For residential, apply minimum yards of Sec 47-5.38, RMH-60**** Rear - none for nonresidential and mixed use unless otherwise provided for in Sec. 47-13.20. For residential apply minimum yards of Sec 47-5.38RMH-60****	4. First Floor Transparency – min of 35% of first floor. 5. Awnings, canopies, arcades are required over all doors/windows required by subsection H.4 (height to be between 7ft 6in (this is currently being changed to 8 ft to be compatible with FBC) and 12 ft and 4 ft in depth).			2. Street Trees, see H.7 3. Location of Street Trees, see H.8
RAC-UV	Automotive, Boats, Watercraft and Marinas, Commercial Recreation, Food and Beverage Sales and Service, Lodging, Manufacturing, Public Purpose Uses, Residential Uses (Note 1), Retail Sales, Services/Office Facilities, including Wholesale Service, and Accessory Uses, Buildings and Structures	55 ft. up t o 150 ft.***, unless subject to neighborhood compatibility requirements**, and adequacy requirements Unspecified for South of NE/NW 5 St.	None	None	Front -see Sec 47-13.20 Side – none for nonresidential and mixed use unless otherwise provided for in Sec. 47-13.20; For residential, apply minimum yards of Sec 47-5.38,RMH-60**** Rear - none for nonresidential and mixed use unless otherwise provided for in Sec. 47-13.20; For residential, apply minimum yards of Sec 47-5.38, RMH-60****	6. Cornice – a cornice shall be provided a min of 12 ft above sidewalk or at level similar to adjacent properties (max 35 ft). 7. Street Trees – shade trees per 40 ft (shade trees 14 ft high, palm 18 ft high, ornamental 12 ft high). Alternative configurations are considered.		2. Additional Criteria – along N. & S. New River Dr. development must follow regulations in Section H. Ground level uses must contain pedestrian oriented designs.	
RAC-RPO	Automotive, Boats, Watercraft and Marinas, Commercial Recreation, Food and Beverage Sales and Service, Lodging, Manufacturing, Public Purpose Facilities, Residential Uses (Note 1), Retail Sales, Services/Office Facilities, and Accessory Uses, Buildings and Structures	55 ft. up t o 150 ft.***, unless subject to neighborhood compatibility requirements and adequacy requirements	None	35 du/acre – up to 50 du/acre***	Front - see Sec 47-13.20 Side – none for nonresidential and mixed use unless otherwise provided for in Sec. 47-13.20; For residential apply minimum yards of Sec 47-5.38, RMH-60**** Rear - none for nonresidential and mixed use unless otherwise provided for in Sec. 47-13.20; For residential apply minimum yards of Sec 47-5.38,RMH-60****	8. Location of Street Trees – may be located in public right-of-way.			
RAC-TMU EMU WMU SMU	Automotive, Boats, Watercraft and Marinas, Commercial Recreation, Food and Beverage Sales and Service, Lodging, Manufacturing, Public Purpose Uses, Residential Uses (Note 1), Retail Sales, Services, and Accessory Uses, Buildings and Structures.	None, except for neighborhood compatibility requirements**, and adequacy requirements	None	None; greater than 25 du/acre see Sec. 47-13.20.	Front - see Sec 47-13.20 Side – none for nonresidential and mixed use unless otherwise provided for in Sec. 47-13.20; For residential, apply minimum yards of Sec. 47-5.38, RMH-60****, Greater side yard may be required see Sec. 47-13.20. Rear - none for nonresidential and mixed use, unless otherwise provided for in Sec. 47-13.20; For residential, apply minimum yards of Sec. 47-5.38, RMH-60****, Greater rear yard may be required see Sec. 47-13.20.	9. Building stepbacks – at cornice (see Section H.6) a min stepback of 10ft. At a level between 4 th and 10 th floor an additional min 10 ft stepback or multiple ones, or alternative approved design. 10. New develop/redevelopment – shall meet all of the ULDR and all other requirements of streets within 50ft of the closest street. 11. This code does not apply to structures built before 1997, unless 50% is voluntarily demolished/replaced			

*Side and rear setbacks as provided herein, except as regulated by Section 47-25.3, Neighborhood Compatibility Requirements.
** No maximum height, unless otherwise provided in those subsections of Section 47-25.3, Neighborhood Compatibility Requirements.
*** Height: Heights above fifty-five (55) feet and up to one hundred fifty (150) feet shall be reviewed subject to the requirements of Section 47-24.3, Conditional Use Permit, except that parcels abutting Andrews Ave. and Federal Hwy. shall be exempt from Conditional Use Review for height. Density in the RAC-RPO: Above thirty-five (35) du/ac and up to fifty (50) du/ac shall be reviewed subject to the requirements of Section 47-24.3.
**** Setbacks/Yards of one-half building height do not apply.
***** Height at boundary of RAC-CC district shall be one hundred fifty (150) feet; height may be increased one (1) foot for every one (1) foot of setback from the RAC-CC district boundary, for a distance of one hundred (100) feet from the RAC-CC district. (Ord. No. C-97-19, § 1(47-13.5), 6-18-97)

Note 1: Residential units are subject to availability of units in the Regional Activity Pool.

CAPACITY & GREEN SPACE ANALYSIS

DOWNTOWN REGIONAL ACTIVITY CENTER: UNIT COUNT, POPULATION & DENSITY

Urratt Capacity Study

A. DOWNTOWN RAC: AREAS

1	Gross Area=	31,519,310 sf=	749.7 acres	(includes New River and canals)
2	Streets, Public Space, Parks, River, Canals, etc. =		281.7 acres	(approx. 38% of Gross)
3	Net Area=	20,091,914 sf=	468.0 acres	
4	Estimated Land Area for Potential Future Redevelopment		330.3 acres	(approx. 71% of Net)

B. DOWNTOWN RAC: UNIT COUNT, POPULATION & DENSITY EXISTING CONDITIONS

	Unit Allocation	# Units	Density (NET)	Density (GROSS)	Population Estimate (# units x 2 occ.)
1	Current:				
	pre-existing Sept. 2000 count	1529			
	recently built or under construction	2141			
	TOTAL	3,670	7.8 du/ acre	4.9 du/ acre	approx. 7,340
2	Near Future: (approved)				
	from TOTAL above	3670			
	allocated, remaining from original 5,100	1430			
	borrowed from Flex Zone 54, for use south of Broward only	216			
	borrowed from Flex Zone 49, for use north of Broward only	267			
	TOTAL	5,583	11.9 du/ acre	7.4 du/ acre	approx. 11,166
3	Short Term:				
	from TOTAL above	5583			
	next round - not yet allocated	2960			
	TOTAL	8,543	18.3 du/ acre	11.4 du/ acre	approx. 17,086

C. DOWNTOWN RAC: UNIT COUNT, POPULATION & DENSITY FUTURE ESTIMATES @ POTENTIAL FULL BUILD-OUT

	Unit Allocation	# Units	Density (NET)	Density (GROSS)	Population Estimate (# units x 2 occ.)
4	Long Term: (Master Plan Est.)				
	from TOTAL above	8543			
	next round - not yet allocated; SEE BELOW* range from:	3157 to 14857			
	TOTAL range from:	11,700 to 23,400	25.0 to 50.0 du/ acre	15.6 to 31.2 du/ acre	approx. 23,400 to 46,800
	* Unit count @ 25 du/ acre (NET) = 468x25 = 11700 * Unit count @ 50 du/ acre (NET) = 468x50 = 23400				
4	Long Term: (Full Build-out of all soft sites under Current Regulations)				
	from TOTAL above (existing and allocated for short-term)	8543			
	RAC-CC 151.4 acres	18925 to 22710	125 to 150 du/acre		
	RAC-RPO 24.8 acres	1240	50 du/acre		
	RAC-WMU 23.1 acres	1155 to 2310	50 to 100 du/acre		
	RAC-UV 77.8 acres	3890 to 7780	50 to 100 du/acre		
	RAC-SMU 21.3 acres	1065 to 2130	50 to 100 du/acre		
	RAC-EMU 22.7 acres	1135 to 2270	50 to 100 du/acre		
	RAC-AS 7.3 acres	255.5	35 du/acre		
	H-1 2 acres	30	15 du/acre		
	TOTAL range from:	36,239 to 47,269	average 77.4 to 101.0 du/ acre	48.3 to 63.0 du/ acre	approx. 72,477 to 94,537

D. DENSITY COMPARISONS

Savannah, GA	GROSS	approximately 30 du/ acre	anecdotal
South Beach Miami FL	GROSS	approximately 35 du/ acre	anecdotal

MARKET ANALYSIS

To: Bruce Chatterton
City of Fort Lauderdale
From: Paul Lambert
Lambert Advisory
Date: February 18, 2003
Subject: Downtown Fort Lauderdale – Demand Projections by Use through 2010

This memorandum sets forth Lambert Advisory’s preliminary findings related to the Downtown Fort Lauderdale Demand Projections by Use (through 2010). The basis for our analysis contemplates historical and forecast economic, demographic and market trends both locally and regionally that have an impact on demand for specific uses in Downtown Fort Lauderdale, including: Office, Rental Housing, For-Sale Housing, Retail, and Hotel. Our initiative was primarily restricted to “desk-top” analysis.

The analysis used to assess prospective market demand is summarized herein and segmented into two main areas:

- 1.) Employment Demand – Employment in the downtown area is one of the principal factors to projecting demand for residential, office and retail. Therefore, projecting employment for Downtown Fort Lauderdale through 2010 provides the basis for many underlying assumptions.
- 2.) Demand by Use – From employment demand, as well as other factors that will be discussed, we will determine demand by use.

Employment Demand

Presently, there is no specific source profiling employment in downtown Ft. Lauderdale. Therefore, in an effort to determine the existing and projected employment base, we concentrated on three major employment sectors within the downtown Ft. Lauderdale market: Office, retail/hospitality and hospital employment.

Downtown Office Employment – Black’s Office Guide and the Ft. Lauderdale Downtown Development Authority indicate approximately 5.0 million square feet of (private sector) office space in the CBD. We estimate an additional 225,000 square feet of public sector space in the area. Utilizing a ratio of 225 square feet per private office worker¹ and 225 square feet per public sector worker, and an average occupancy of 90 percent, current downtown office employment approximates 25,000 persons.

In an effort to support the estimate of base employment, as well as the estimates for employment projections, we prepared the following table to illustrate our analysis:

¹ BOMA Experience Exchange Report

Broward County and Downtown Fort Lauderdale Office Employment (Existing and Projected Demand) 2002 and 2010					
Broward County Employment Projections by Industry (2002 and 2010)			Annual Change	Annual %Change	
	2002	2010			
Agricultural & Mining	10,848	12,986	267	2.3%	
Construction	41,310	44,722	427	1.0%	
Manufacturing	38,120	34,234	(486)	-1.3%	
Trans., Comm. & Utility	32,825	37,626	600	1.7%	
Wholesale Trade	47,489	53,491	750	1.5%	
Retail Trade	148,286	163,715	1,929	1.2%	
FIRE	51,970	57,418	681	1.3%	
Services	318,299	380,455	7,770	2.3%	
Government	92,146	103,585	1,430	1.5%	
Total	781,293	888,232	13,367	1.6%	
*Self Employed and Unpaid Family labor included within Services sector					
Broward County Office Employment by Industry (2002 and 2010)			Annual Change	Annual %Change	
	2002	2010			
Percent of FIRE:	95%	49,372	54,547	647	1.3%
Percent of Services:	27.5%	87,532	104,625	2,137	2.3%
Percent Other	10.0%	41,102	45,036	492	1.1%
Total Office Employment		178,006	204,208	3,275	1.7%
Downtown Ft. Lauderdale Office Employment (2002 and 2010)					
% of County:	15.0%	26,701	30,631	491	1.7%
% of County:	20.0%	35,601	40,842	655	1.7%

Source: Florida Dept. of Labor; Black’s Office Guide; Lambert Advisory

Based upon Florida Department of Labor statistics, Broward County’s total employment in 2002 was 781,293. Accordingly, the Department of Labor projects employment to be 888,232 in 2010, or an average annual increase of 13,367 jobs during the next eight years. To ascertain the need for office space among the employment sectors, we estimate that approximately 95 percent of FIRE sector jobs require office space, 27.5 percent of Services sector require office space, and 10 percent of all other sectors require office space. Based upon these assumptions, office employment for the County is currently in the range of 180,000, increasing to 205,000 (or 3,300 office jobs per annum) in 2010. Considering that Downtown Fort Lauderdale represents approximately 15 percent of the County’s inventory (reported to be roughly 35 million square feet), the analysis indicates approximately 26,500 office jobs currently in downtown Ft. Lauderdale, which is directly in line with the 25,000 jobs estimated above. Therefore, as indicated in the table above, downtown Fort Lauderdale employment is projected to increase to 30,600 by 2010, or nearly 500 office jobs per year. If downtown captures slightly more than its “fair share” of office development during the next several years, the demand increased to between 650 to 700 office jobs per year.

Retail/Hospitality – Again, there is no formal source of data that provides downtown employment statistics within the retail/hospitality sector. Nonetheless, we estimate

approximately 600,000 square feet of retail space within the downtown market which considers the major retail facilities (Riverwalk and Las Olas) as well as smaller retail centers/stores. This represents slightly less than 5 percent of the County's total retail inventory (reportedly 15 million square feet), which is generally supported by Ft. Lauderdale DDA statistics. At an estimated 500 square feet per worker², downtown retail employment is estimated to be 1,200 workers. Accordingly, we assume 300 additional (professional) employees working within the area's hotel facilities. Utilizing the employment growth rate projections prepared by the Department of Labor, retail/hospitality employment should increase by 1.7 percent per year, or 25 to 30 jobs annually. However, it is reasonable to assume that with the amount of new development and related activity currently taking place in downtown Fort Lauderdale, it is reasonable to assume that retail/hospitality employment growth may actually be 50 to 60 jobs per year.

Broward General Hospital – Broward General Hospital reportedly employs a total of 2,300 workers, and is estimated to add an average 17 new employees per year.

Based upon the analysis above, the following provides a summary of downtown Ft. Lauderdale employment currently and projected 2010, which will provide the basis for determining demand by use:

Downtown Ft. Lauderdale Employment Profile (2002 and 2010)	2002	2010	Annual Change	Annual %Change
Office Employment	26,701	30,631	491	1.7%
Retail/Hospitality	1,550	1,950	50	2.9%
Broward General	2,300	2,436	17	0.7%
Total Employment Downtown	30,551	35,017	558	1.7%

Demand by Use

As noted above, employment demand is one of the most significant drivers to determining demand among various development uses. However, there are also several other factors that provide the basis for determining demand that must be considered. Following provides a summary of demand by use, which contemplates three projection scenarios summarized as:

- Scenario 1:* Represents a “conservative” approach to assumptions and estimates and would reflect a significant unexpected downturn in economic and/or market conditions;
- Scenario 2:* Represents an “expected” approach to the process and is largely based upon historical trends;
- Scenario 3:* Represents an “aggressive” approach whereby downtown Fort Lauderdale exceeds growth expectations and “fair share” capture of market demand.

Office Space Demand

The demand for office space is directly related to projected office employment. As noted above, office employment in downtown Fort Lauderdale is projected to increase by

² ULI, Dollars and Cents of Shopping Centers 2000

approximately 500 to 700 jobs per year. Utilizing the factor of 225 square feet of space per employee, following is a summary of projected demand for three scenarios:

Downtown Ft. Lauderdale Office Space Demand (Projected 2010)	Scenario 1	Scenario 2	Scenario 3
Projected Annual Employment Growth:	500	700	900
Sq.Ft. per Employee	225 s.f.	225 s.f.	225 s.f.
Total Office Space Demanded (annual):	112,500 s.f.	157,500 s.f.	202,500 s.f.
Total Office Space Demanded 2003 to 2010:	900,000 s.f.	1,260,000 s.f.	1,620,000 s.f.

As a measurement against historical office development trends in downtown Fort Lauderdale, an average of approximately 190,000 square feet of space has been added to the market annually since 1980.

Housing Demand

Housing demand for downtown Ft. Lauderdale is driven by employment growth, and from non-downtown workers and second home residents; accordingly, the distinction between rental and for-sale demand has been contemplated. Following is a summary of assumptions and factors used to project demand for housing:

Employment Conversion – In an effort to derive a factor to “convert” downtown employment to residential demand, we reference a study conducted by the Miami Downtown Development Authority (1998) that surveyed downtown office workers to measure their interest in living within the CBD (in either rental or for-sale). The survey indicated that 18 percent of all office workers were “very likely” to live downtown (provided desirable available product) and an additional sixteen percent indicated that they would be “somewhat likely” to live downtown. Therefore, if we assume that 70 to 100 percent of the “very likely” candidates will actually move downtown, and 10 to 20 percent of the “somewhat likely” move downtown, we estimate an office worker-to-resident “conversion” factor of 18 percent to 26 percent.

In terms of converting retail/hospitality employment to residential demand, we assume that since wages are typically lower than that of the professional services, a worker-to-resident “conversion” factor of 7.5 to 12.5 percent has been applied. Furthermore, assuming a maximum 50 percent of hospital workers are financially qualified for downtown housing, we apply a higher potential “capture” ratio for this employment base given their odd working hours and need to be close to work, estimated between 25 to 35.

Downtown Ft. Lauderdale Residential Demand from Employment	Scenario 1	Scenario 2	Scenario 3
Est. Annual Employment Growth (thru 2010)	600	700	800
% DT Office Employee (prefer DT residence)	18%	22%	26%
Est. Retail/Hospitality DT Employment Growth	60	60	60
% DT Retail Employee (prefer DT residence)	8%	10%	13%
Est. Broward General/Other ⁸	17	17	17
% DT			

MARKET ANALYSIS

Based upon the number of downtown workers and applying the appropriate “conversion” factors outlined above, projected demand (rental and for-sale) from downtown employment is estimated to range between roughly 120 and 220 households.

To determine the demand for rental and for-sale product within the downtown market, we apply the following factors:

Housing Tenure - To break down the proportion of for-sale and rental demand, we apply a 50/50 ownership to rental factor. Although 2000 Census data indicates that rental inventory represents as much as 75 percent of housing downtown, we apply an upward adjustment to for-sale housing to account for an increasing younger, professional and second home demand base seeking to buy within this urban environment.

Multi-family Dwelling – We estimate that 90 percent of the renter demand will reside within multi-family dwellings (essentially the only development type that is feasible to build in the downtown area), as opposed to purchasing existing single family homes.

Non-Downtown Employee Demand – Obviously not all downtown rental and for-sale demand will come solely from downtown employment. As noted, upwards of 80 percent of downtown housing demand is generated from downtown workers. However, an adjustment is warranted to account for the fact that downtown Ft. Lauderdale provides a desirable urban community that has historically lacked quality downtown housing product; therefore, there should be an increased level of demand from areas outside of the CBD. For this, we apply a non-downtown employee demand adjustment for rental product to range between 60 and 80 percent, while for-sale housing will have an adjustment of between 50 and 70 percent due to the fact that there is a significant second home market in the for-sale product.

Downtown Ft. Lauderdale	Rental Housing			For-Sale Housing		
	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
Residential Demand from Employment						
Sub Total - DT Employee Resident Base	117	165	221	117	165	221
% Housing Tenure (Rental)	50%	50%	50%	50%	50%	50%
DT Employee Renter/Owner Base	58	82	111	58	82	111
% Residing in Multi-Fam. Complex	90%	90%	90%	90%	90%	90%
DT Employee Rental/Owner Market	52	74	100	52	74	100
Adjust for Non-DT Employee Demand	80%	70%	60%	70%	60%	50%
Total Rental/Owner Market Demand (annual)	65	106	166	75	124	193
Total Housing Demanded 2003 to 2010:	525	848	1,328	600	990	1,593

After applying the above factors to the total estimated housing demand, we estimate that the total demand for rental housing in downtown Ft. Lauderdale is in the range of 65 to 165± units per year, or a total of 525 to 1,325 units through 2010. Accordingly, we estimate that the total demand for for-sale housing in downtown Ft. Lauderdale is in the range of 75 to 200± units per year, or a total of 600 to 1,600 units through 2010. In aggregate, total housing demand (rental and for-sale) is estimated to be roughly 145 to 365 units per year, or 1,125 to nearly 3,000 units through 2010.

Retail Demand

We have developed a retail trade model for downtown Fort Lauderdale which uses income and expenditure trends in a defined market area to determine demand for retail space by major retail category. Capture estimates take into account the strength of major retail nodes of activity outside of the trade area.

It should be noted that our retail model has two components. The first model is based upon primary area resident, inflow from residents in the surrounding region, and visitor expenditure in the primary trade area. The second model is based upon the inflow of day time worker expenditure into downtown Fort Lauderdale driven by surveys of daytime worker expenditure conducted by the International Council of Shopping Centers in 1997. The Lambert Advisory Retail Trade Model is provided in detail, including a summary of our methodology, as an attachment to this memorandum. Following is a summary of retail demand by category:

Downtown Ft. Lauderdale			
Avg. Annual Retail S.F. Demand by Category	Scenario 1	Scenario 2	Scenario 3
Shoppers Goods*	6,000	8,500	11,000
Food Stores	5,000	7,500	10,000
Eating & Drinking Establishments	5,000	7,000	9,000
Pharmacies	1,000	2,000	3,000
Other Retail (Building, Liquor Stores)	2,100	3,500	5,000
Total Retail Sq.Ft. Demanded (annually)	19,100	28,500	38,000
Total Retail Sq.Ft. Demand (2003 to 2010)	133,700	199,500	266,000

* General Merchandise, apparel, furniture and home equip., hardware & misc.)

We estimate that retail space demand resident and day worker expenditure in downtown Fort Lauderdale will average approximately 22,000 to 38,000 square feet per year through 2010, or total 160,000 to 260,000 square feet during the period. This breaks down approximately 90 percent from expenditures of trade area residents, other inflow of resident sales from outside the trade area, and their visitors and 10 percent from non-resident day workers.

Hotel Demand

Downtown Fort Lauderdale’s hotel market primarily comprises the Riverside Hotel and the new Hampton Inn, or a combined total of less than 300 rooms. Throughout the surrounding area, basically extending south to 17th Street, east to the beaches and north to Sunrise Boulevard, there is more than 4,500 hotel rooms which is deemed to adequately service existing and near term (future) demand.

It is our belief that the downtown Fort Lauderdale hotel market should remain at least at current levels for the next twenty four to thirty six months. Beyond that time frame, we project that there may be an opportunity to build up to 250 rooms in the downtown area, representing the only addition to hotel supply in the downtown area through 2010.

Conclusions

Based upon the research and analysis outlined above, following is a summary of projected demand by use for downtown Fort Lauderdale through 2010:

Downtown Fort Lauderdale Projected Demand by Use (Annually and Total 2010)			
Use	Scenario 1	Scenario 2	Scenario 3
Office Space (Average Annual)	112,500	157,500	202,500
Office Space (Total Through 2010)	900,000	1,260,000	1,620,000
Rental Housing (Average Annual)	66	106	166
For-Sale Housing (Average Annual)	75	124	199
Rental Housing (Total Through 2010)	525	848	1,328
For-Sale Housing (Total Through 2010)	600	990	1,593
Total Housing (Average Annual)	141	230	365
Total Housing (Total Through 2010)	1,125	1,838	2,921
Retail Space (Average Annual)	19,100	28,500	38,000
Retail Space (Total Through 2010)	133,700	199,500	266,000
Hotel Rooms (Average Annual)	N/A	N/A	N/A
Hotel Rooms (Total Through 2010)	100	200	250

STREET DESIGN REQUIREMENTS

	Current Standards		Master Plan Standards
	Local	County/State	
ROW (Existing)			
Broward Blvd (Arterial)	85-100ft	100ft ¹	85-100ft
Federal Hwy (Arterial)	100ft	120ft ²	120ft
Andrews Ave (Arterial)	60-70ft	88ft ³	70ft
3 rd Ave (Arterial/Collector)	70-80ft	80ft ⁴	80ft
Local Streets	40-80ft	-	Varies
Number of Travel Lanes			
Broward Blvd (Arterial)	6-Lane & turn; non-designated bike line	?? verify	6 + turn; no bike lane
Federal Hwy (Arterial)	6-Lane& turn	8-lane & turn	6+ turn
Andrews Ave (Arterial)	4-Lane & turn	?? verify	3+ turn + 1 bike lane
3 rd Ave (Arterial/Collector)	4-Lane & turn	?? verify	3+ turn + 1 bike lane
Lane Width			
Arterial		12ft ⁵ , 11ft ⁶	11ft
Collector		11ft ⁷	10ft-6in
Local		10-11ft ⁸	10ft
Transportation Design for Livable Communities (TDLC) Projects		11ft & 10ft ⁹	10ft
On-Street Parking			
Required Locations	Not required	Not required	Required on all streets except Broward and Federal
City of Fort Lauderdale Standard for Parallel (unclear where it's measured from)	8ft-8in ¹⁰		8ft (art./coll.) 7ft (local)
TDLC Projects		8ft & 7ft ¹¹	7ft
Bike Lanes			
Next to On-Street Parking		5ft ¹²	5ft
Next to Travel Lane		4ft ¹³	4ft
Non-Designated Bike Lanes		3ft	3ft
Street Corner			
Turning Radius		35ft ¹⁴	15ft max
Corner Clearance or Sight Triangles (at curb)			

¹ Broward County Planning Council (Feb. 2002), *Broward County Trafficways Plan*
² Broward County Planning Council (Feb. 2002), *Broward County Trafficways Plan*
³ Broward County Planning Council (Feb. 2002), *Broward County Trafficways Plan*
⁴ Broward County Planning Council (Feb. 2002), *Broward County Trafficways Plan*
⁵ Note: This is for an Arterial through or travel lane.
Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40
⁶ Note: Is permitted on an Arterial given specific conditions.
Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40
⁷ Note: For a Collector through or travel lane.
Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40
⁸ Florida Department of Transportation (May 2002), *Manual of Uniform Minimum Standards for Design, Construction and Maintenance, for Streets and Highways (The Greenbook)*, pg 3-58
⁹ Note: TDLC lane widths are 11ft, and can be reduced to 10ft given conditions.
Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 21-5.
¹⁰ City of Fort Lauderdale (Sept. 2002), *Code of Ordnances and Unified Land Development Regulations*, Sec. 47-20.11
¹¹ Note: TDLC parking lanes can be reduced to 7ft (measure from face of curb) in residential areas.
Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, Ch. 21.
¹² Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, Ch 8, pg 8-5 and Ch 21, pg 21.5
¹³ Note: Measured from the lip of the gutter i.e. 5.5 ft wide.
Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, Ch 8, pg 8-5 and Ch 21, pg 21.5
¹⁴ Note: Florida Building Code requires a 35ft min turning radius, and the CRA has been able to use a 20ft-turning radius, however, no information was found on this subject.

	Current Standards		Master Plan Standards
	Local	County/State	
Minor/Minor intersection	25ft ¹⁵		none required
Minor/Major intersection	25ft ¹⁶		none required
Major/Major intersection	25ft ¹⁷		none required
Corner Cords (Utility easement at property line for building setback)			
Minor/Minor intersection		20ft ¹⁸	None required
Minor/Major intersection		25ft ¹⁹	None required
Major/Major intersection		30ft ²⁰	None required
Setback (from property line)			
RAC Pedestrian Priority Street	10ft ²¹ (75% min), 5ft ²² (25% or <)		No longer applicable: See Urban Design Guidelines Street Sections
RAC Image Street	10ft ²³ , (75% min), 5ft ²⁴ (25% or <)		No longer applicable: See Urban Design Guidelines Street Sections
All other RAC Streets	5ft ²⁵		5'
New River Corridor (all properties within 100ft of seawall)	60ft ²⁶ , (20-45ft ²⁷)		Varies; create Riverwalk Master Plan guidelines
Street Edges (Shoulder)			
Street Trees			
	Ped. Priority reg.: Shade- at least 40ft o.c. ²⁸ , Palm at least 20ft o.c. ²⁹		Shade- 30 ft o.c. max. Palm- 22 ft o.c. max.
- Tree Spacing			
- Clear Sight (measured from roadway to bottom of tree canopy)	6ft shade & 8ft of wood palm ³⁰	8ft-6in ³¹	6' shade, 8' palm
- Horizontal Clearance if, Caliper > 4in (from face of curb to face of tree trunk)		4ft(new trees) ³² , 1.5ft (existing trees or design speed < 25mph) ³³	Min. 3ft ; Max. 5ft (new) 1.5ft (existing trees or design speed < 25mph)
- Frangible Plants/Trees < 4in caliper and > 18in tall		No min distance from curb	No min. dist. from curb
Tree Canopy (face of building to face of tree trunk)			
- Shade Tree		15ft ³⁴	12ft
- Palm Tree		7.5ft ³⁵	6ft
			Primary row of street trees adjacent to curb
Tree placement relative to curb		No requirement	
Low Hedges (measured from roadway to top of hedge)			
- Clear Sight		< 18in ³⁶	18in max.

¹⁵ Note: Can have a hedge up to 30in measured from crown of roadway within limits of sight triangle. City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec. 47-19.5

¹⁶ Note: Can have a hedge up to 30in measured from crown of roadway within limits of sight triangle. City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec. 47-19.5

¹⁷ Note: Can have a hedge up to 30in measured from crown of roadway within limits of sight triangle. City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec. 47-19.5

¹⁸ Note: This is said to be a County Requirement, and most County requirements refer back to FDOT standards.

¹⁹ Note: This is said to be a County Requirement, and most County requirements refer back to FDOT standards.

²⁰ Note: This is said to be a County Requirement, and most County requirements refer back to FDOT standards.

²¹ Note: 75% of building frontage must be at a 10ft setback. City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec 47-13.20

²² Note: Other parts of building can be at a 5ft setback. City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec 47-13.20

²³ Note: 75% of building frontage must be at a 10ft setback. City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec 47-13.20

²⁴ Note: Other parts of building can be at a 5ft setback. City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec 47-13.20

²⁵ City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec 47-13.20

²⁶ City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec 47-13.20

²⁷ Note: Depending the condition the setback can be 20ft, 35ft, or 45ft. City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec 47-13.20

²⁸ Note: This is for roadways within the RAC. City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec 47-13.20

²⁹ Note: This is for roadways within the RAC. City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec 47-13.20

³⁰ City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec 47-13.20

³¹ Note: This is from the sight distance at intersections. Florida Department of Transportation (Jan. 2002). *Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System*, Index 546.

³² Note: This is for horizontal clearance to trees. Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-78

³³ Note: This is the TDLC Horizontal clearance to trees for EXISTING PLANTINGS. Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 21-7.

Note: Florida Greenbook it calls for 1.5ft of clear zone on streets with design speeds of 25mph or less. Also if conditions due not permit clear zone can be reduced to 1.5ft, in cases of design speed > 25mh.

Florida Department of Transportation (May 2002), *Manual of Uniform Minimum Standards for Design, Construction and Maintenance, for Streets and Highways (The Greenbook)*. Pg. 3-60.

³⁴ City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec. 47-21.6

³⁵ City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec. 47-21.6

³⁶ Note: This is from the sight distance at intersections. Florida Department of Transportation (Jan. 2002). *Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System*, Index 546

STREET DESIGN REQUIREMENTS

	Current Standards		Master Plan Standards
	Local	County/State	
Curbs (type F)		2ft ³⁷	18in
Sidewalk Width (min 3ft ADA)	5ft ³⁸	4-6ft ³⁹ , 6ft ⁴⁰	5ft min; actual varies
Center Median			
Arterial		12ft ⁴¹ , 11ft ⁴² , 10ft ⁴³	No min.
Collector		11ft ⁴⁴ , 10ft ⁴⁵	No min.
Local		??	No min.
Trees			
- Horizontal Clearance if, Caliper > 4in (from edge of inside traffic lane where median curb is present, <i>not measured from face of curb</i>)	4ft ⁴⁶	6ft (new trees) ⁴⁷ 3ft (existing trees) ⁴⁸	Min. 3ft (new and existing)
- Clear Sight (measured from roadway to bottom of tree canopy)		8ft-6in ⁴⁹	8ft-6in
Low Hedges (measured from roadway to top of hedge)		< 18in ⁵⁰	18in max
	Ped. Priority reg.: Shade-at least 40ft o.c. ⁵¹ , Palm at least 20ft o.c. ⁵²		Shade-40ft o.c. max. Palm-20ft o.c. max.
Tree Spacing			
Curbs (type F)		2ft ⁵³	18in
Turning Lane			
Arterial		12ft ⁵⁴ , 11ft ⁵⁵ , 10ft ⁵⁶	10ft
Collector		11ft ⁵⁷ , 10ft ⁵⁸	10ft
Local			No turn lanes
TDLC Projects		11ft & 10ft ⁵⁹	10ft
Stacking Lengths			
- Unsignalized Intersections (for low volume streets and no turning study)		100ft ⁶⁰	Encourage reduced stacking lengths (See Urban Design guidelines)
- Signalized Intersections (At signalized intersections, the required queue length depends on the signal cycle length, the signal phasing arrangement, and rate of arrivals and departures of turning vehicles.) Assumes 35mph design speed.		145ft plus queue length ⁶¹	Encourage reduced stacking lengths (See Urban Design guidelines)

³⁷ Florida Department of Transportation (Jan. 2002). *Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System*, Index 300

³⁸ Note: This information comes from the Subdivision requirements.

City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec. 47-24.5

³⁹ Note: Standard width of a sidewalk should be 5 feet when separated from the back of curb by a buffer strip. A 4 foot sidewalk may be considered when physical constraints exist and where necessary right of way is unavailable or prohibitively expensive. When sidewalks must be constructed adjacent to the curb, the minimum width should be 6 feet.

Florida Department of Transportation (May 2002), *Manual of Uniform Minimum Standards for Design, Construction and Maintenance, for Streets and Highways (The Greenbook)*. Pg. 3-17.

⁴⁰ Note: Measured from back of curb (not face).

Florida Department of Transportation (2002). *Florida Intersection Design Guide (on Florida State Hwy System)*

⁴¹ Note: For medians on an Arterials.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40

⁴² Note: Is permitted for medians on Arterials given conditions.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40

⁴³ Note: Is permitted for medians on Arterials given conditions.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40

⁴⁴ Note: Is for a median on a Collector.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40

⁴⁵ Note: Is for a median on a Collector.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40

⁴⁶ NEED TO VERIFY, SAID TO BE A CITY REQUIREMENT AND MEASURED FROM FACE OF CURB

⁴⁷ Note: Is for the horizontal clearance to trees.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-78

⁴⁸ Note: This is the TDLC horizontal clearance to trees for EXISTING PLANTINGS.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 21-7

⁴⁹ Note: This is from the sight distance at intersections.

Florida Department of Transportation (Jan. 2002). *Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System*, Index 546.

⁵⁰ Note: This is from the sight distance at intersections.

Florida Department of Transportation (Jan. 2002). *Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System*, Index 546.

⁵¹ Note: This is for roadways within the RAC.

City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec 47-13.20

⁵² Note: This is for roadways within the RAC.

City of Fort Lauderdale (Sept. 2002), *Code of Ordinances and Unified Land Development Regulations*, Sec 47-13.20

⁵³ Florida Department of Transportation (Jan. 2002). *Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System*, Index 300

⁵⁴ Note: This is for turn lanes on an Arterial.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40

⁵⁵ Note: Is permitted for turning lanes on an Arterial given conditions.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40

⁵⁶ Note: Is permitted for turning lanes on an Arterial given conditions.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40

⁵⁷ Note: Is permitted for turning lanes on a Collector given conditions.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40

⁵⁸ Note: Is permitted for turning lanes on a Collector given conditions.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 2-40

⁵⁹ Note: TDLC turn lane widths are 11ft, and can be reduced to 10ft given conditions.

Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, pg 21-5

⁶⁰ Florida Department of Transportation (Jan. 2003), *Plans Preparation Manual – Design Criteria and Process*, Sec. 2.13.2

⁶¹ Note: Can almost assume a 1:1 ratio for queuing length, where 10 cars per hour equals 10 feet in length of turning lane queue length.

Florida Department of Transportation (May 2002), *Manual of Uniform Minimum Standards for Design, Construction and Maintenance, for Streets and Highways (The Greenbook)*. Pg. 3-58

PRELIMINARY CAPITAL COST ANALYSIS

The major capital cost analysis includes a list of specific capital projects that are identified in the Master Plan. This list does not include other capital projects for utilities, roadways and parks that are currently planned or programmed by the City or other applicable agencies. The list of capital projects should be regarded as examples of projects that are specifically needed to implement the Master Plan and are in addition to those identified in various other plans. It is anticipated that the concepts for the design of the projects will be defined by public agencies and included with public capital facility plans. The funding and development of the projects will be accomplished incrementally over time involving the public and private sectors.

Downtown Fort Lauderdale Master Plan List of Typical Major Capital Project Costs	
Major Capital Projects	Conceptual Level Cost Estimates
New River Pedestrian Crossing	
* Standard FDOT Movable Bridge (or)	\$ 7.0 M
* Tramway (15 person gondola)	\$5 to \$8 M
* Ferry (15 person vessel only)	\$ 200K
Roundabout (at Sunrise Blvd. and Federal Hwy.)	
* Diameter ranging from 375 ft to 475 ft (area = 2.5 to 4 acres)	\$3.0 to \$6.0 M
Community, Neighborhood and Pocket Parks (10.5 acres)	\$8.5 to \$14.2 M
Improved Stranahan Park (1.72 acres)	\$700k to \$1.9 M
Typical Streetscape Improvements (400 ft long section)	\$325K to \$575K
Gateway Projects (includes 4 gateways)	\$250K to \$1 M

NOTES:

All estimates shown are based on experiential knowledge and research of similar projects.

All estimates represent only design and construction costs and do not include land acquisition or R-O-W costs.

All estimates are based on 2003 dollars.

All calculations are for planning purposes only and are not based on preliminary design costs.

Roundabout features are limited to: roadway, landscaping and architectural treatments.

Typical park improvements can include: lighting, plazas, landscaping, art, and play equipment where applicable.

Typical streetscape improvements can include: street trees, enhanced lighting, sidewalks, furnishings and landscaping.

Gateways can include: a variety of architectural features and landscaping.

